

IN THE CLAIMS:

This listing of claims replaces all prior versions of claims.

1. (Previously Presented) A composition for inhibiting a Th1 T-cell immune response comprising:
 - a) a nucleic acid eukaryote cell expression carrier encoding a targeted antigen; and
 - b) the targeted antigen polypeptide that is encoded by said nucleic acid eukaryote cell expression carrier encoding a targeted antigen,
wherein ratio of the nucleic acid eukaryote cell expression carrier to the antigen polypeptide is selected from the group consisting of 5:1 (w/w), from 2:1 to 10:1(w/w), from 1:5 to 5:1(w/w), and from 1:2 to 1:10(w/w);
and wherein the composition is effective to inhibit a Th1 T-cell immune response.
- 2-8. (Canceled).
9. (Previously Presented) The composition according to claim 1 further comprising an immunological adjuvant.
10. (Previously Presented) The composition according to claim 1 wherein said nucleic acid eukaryote cell expression carrier is a eukaryote cell expression vector comprising a nucleic acid sequence encoding the targeted antigen polypeptide.
11. (Previously Presented) The composition according to Claim 10, wherein the nucleic acid sequence encoding the targeted antigen polypeptide is linked to a promoter selected from the group consisting of: RSV, CMV and SV40 viral promoters.

12. (Previously Presented) The composition according to Claim 10, wherein said eukaryote cell expression vector is a plasmid, virus, or an expression vector formed of plasmid DNA and a chromosomal DNA fragment.

13-19. (Canceled)

20. (Previously Presented) The composition according to claim 10 wherein said nucleic acid eukaryote cell expression carrier is a plasmid.

21. (Currently Amended) The composition according to claim 1 wherein said targeted antigen is a pathogen antigen.

22. (Withdrawn) A method of inhibiting a Th1 T-cell immune response against a targeted antigen that comprises: administering to an individual a composition of claim 1.

23. (Withdrawn) A method of treating an disease or condition associated with an autoimmune reaction comprising inhibiting a Th1 T-cell immune response by a method according to claim 22.

24. (Withdrawn) The method of claim 23 wherein the disease or condition is selected from the group consisting of: systemic lupus erythematosus, rheumatoid arthritis, chronic lymphatic thyroiditis, toxic goiter, polyarteritis nodosa, insulin-dependent diabetes mellitus, myasthenia gravis, chronic active hepatitis, chronic ulcerative colitis, pernicious anemia with chronic atrophic gastritis, allergic encephalomyelitis, Goodpasture's syndrome, scleroderma, common pemphigus, pemphigoid, adrenocortical insufficiency, primary biliary cirrhosis of the liver, multiple sclerosis, and acute polyneuroradiculitis.

25. (Withdrawn) The method of claim 23 wherein the disease or condition is an autoimmune rejection response in organ transplants.

26. (Withdrawn) A method of treating allergic reactions comprising inhibiting a T-cell immune response by a method according to claim 22.

27. (Withdrawn) The method of claim 26 wherein the allergic reactions is to an allergen selected from the group consisting of dust mites, fleas, cockroaches, animal hr, pollen, mold, and bacteria.

28. (Withdrawn) The method of claim 26 wherein the allergic reactions is a virus- and tobacco smoke-induced skin and respiratory tract injuries.

29. (Withdrawn) The method of claim 26 wherein the allergic reactions is an allergic response or immunity overstimulation-induced allergic immune disorders selected from the group consisting of: contact dermatitis, urticaria, allergic rhinitis, asthma, nephritis, hyperthyroidism, and viral hepatitis immuno-hypersensitivity.

30. (Previously Presented) The composition of claim 1 wherein said ratio is in the range of 2:1 to 10:1(w/w).

31. (Previously Presented) The composition of claim 1 wherein said ratio is in the range of 1:5 to 5:1(w/w)

32. (Previously Presented) The composition of claim 1 wherein said ratio is in the range of 1:2 to 1:10(w/w).

33. (Previously Presented) The composition of claim 1 wherein said ratio is 5:1 (w/w).

34. (Previously Presented) The composition of claim 1 wherein said ratio is 2:1 (w/w).

35. (Previously Presented) The composition of claim 1 wherein said ratio is 1:2 (w/w).

36. (New) The composition of claim 1, wherein the composition that is effective to inhibit a Th1 T-cell immune response is effective to decrease interferon- γ levels.

37. (New) The composition of claim 36, wherein said composition that is effective to decrease interferon- γ levels when a subject is exposed to said antigen as compared to a composition consisting of a nucleic acid eukaryote cell expression carrier encoding a targeted antigen or the targeted antigen polypeptide that is encoded by said nucleic acid eukaryote cell expression carrier encoding a targeted antigen.